

REMARKS

Applicant appreciates the courtesy of a telephone conference on November 1, 2011 with Examiners Hasan and Vo where the content of the Telephone Interview Request was discussed along with the *Yamane et al.* U.S. Patent No. 6,181,872. Applicant verified that the SRC (System Reference Clock) of *Yamane et al.* was being relied upon to teach a second presentation time stamp in our original claims. Applicant directed the Examiners attention to Col. 24, Lines 41-50, Col. 25, Lines 40-44, Col. 31, Lines 20-27 and Col. 74, Lines 40-43 to support Applicant's position that SRC was for only synchronization of audio-visual data playback and not to define a state of the graphics data as decoded and currently available for display and that our proposed claim would appear to distinguish over *Yamane et al.*

Applicant explained proposed amendments of the specification on Paragraphs [0007], [0008], [0009] and [0018] to clarify the foundation for our current claim language.

Examiner Hasan further asked for support for the term "adder" in the proposed claim and Figure 26 shows (+) as element 10. The specification in Applicant's Published Patent Application No. US 2006/0153532 also identifies adder 10 in Paragraphs [0266] and [0277].

There was no final agreement on allowability and Examiner Hasan indicated he would perform an additional search if we filed the proposed claim.

The present invention relates to an improvement in displaying graphics such as subtitle display and interactive display to enable a video and audio stream in, for example, a movie, to add additional language subtitles and/or additional graphic features that accompany the sale of the movie on a recording medium. A number of subtle problems must be resolved in order to permit both the authoring and editing of such compilations of a video and audio movie with post

production graphics and the reproduction of the desired artwork in a relatively seamless manner to the user.

Applicant has amended the specification without adding new matter, to provide antecedent basis for the terminology set forth in our claims.

It is believed with an appreciation of the terminology of our claims that Panasonic's *Yamane et al.* (U.S. Patent No. 6,181,872) does not teach the improvements to this field in the present application.

As noted in Paragraphs [0015] and [0016] of our specification, the integration of the graphics data including decoding and writing the decoded video data into a video plane should be implemented in a manner that permits any updating of the graphics to be synchronized with the display of the moving picture. This is particularly true with the use of subtitles.

In this regard, the value of a first presentation time stamp inserted in the data packet, including the graphics data, along with the decode time stamp indicating a decoding time for the graphics data, is defined. The first presentation time stamp indicates a decoding ending time which complements the decode time stamp and is also stored with a graphics data packet.

The control packet in the graphic stream provides a second presentation time stamp indicated as a time obtained by adding a predetermined period to the decoding ending time. As a result, the controller is thereby enabled to perform an updating at an adequate time without receiving from the processor any decoding-completion notification of graphics data. This feature also assures an update synchronization with the display of the moving picture regardless of the manner of implementation in the reproduction apparatus. See Paragraph [0018].

The advantages of such features are defined in Paragraph [0019] as follows:

[0019] Since closer processor-controller connection is realized regardless of the manner of processor-controller implementation in the reproduction

apparatus, it becomes possible to maintain a degree of flexibility in the apparatus designing, as well as facilitating manufacturing apparatuses at low cost.

As can be appreciated, our claims also define, for example in Claim 47, a video decoder, a separate processor for decoding the graphics, and a controller capable of writing decoded graphic data in a graphics plane by the desired presentation time with the graphic plane defining an area where the graphic is to be rendered and an adder operable to add the respective video data in the video plane and the graphics data in the graphics plane.

The Office Action raised a 35 U.S.C. §101 issue with regards to Claim 49. Claim 49 has now been appropriately amended, as suggested by the Examiner, to “non-transitory” and applicants appreciate this direction from the Examiner.

The Office Action further held that Claims 47-51 were anticipated under 35 U.S.C. §102(b) over *Yamane et al.* (U.S. Patent No. 6,181,872).

“[A]nticipation by inherent disclosure is appropriate only when the reference discloses prior art that must *necessarily* include the unstated limitation... .”

Transclean Corp. v. Bridgwood Services, Inc., 290 F.3d 1364, 62 USPQ2d 1865 (Fed. Cir. 2002)

Applicants respectfully traverse this rejection and believe that the Office Action is relying upon Figures 19 and has erroneously presumed that the System Clock Reference, SCR shown in Figure 19, constitutes the “second presentation time stamp” as defined in our claims. Under the MPEG standard, the system clock reference SCR is a reference clock for the entire decoder operation. At most, it can be considered to be a time management specific to an individual disk player for a decoder system, Column 24, Lines 41-50.

As described above, the pack header PKH records the time at which that pack is to be sent from stream buffer 2400 to system decoder 2500 (see

FIG. 26), i.e., the system clock references SCR defining the reference time for synchronized audio-visual data playback.

Column 25, Lines 40-44.

* * *

The decoding system controller 2300 compares the system clock reference SCR contained in the stream control data extracted from the stream buffer 2400 with the system clock St79 supplied from the synchronizer 2900, and generates the read request signal St65 when the system clock St79 is greater than the system clock reference SCR of the bitstream control data St63. Pack transfers are controlled by executing this control process on a pack unit.

Column 31, Lines 20-27.

* * *

The system clock reference SCR buffer SCR_buffer is the buffer for temporarily storing the system clock reference SCR recorded to the pack header as shown in FIG. 19. As described using FIG. 26, this temporarily stored system clock reference SCR is output to the decoding system controller 2300 as the bitstream control data St63.

Column 74, Lines 40-45.

Yamane et al. is owned by Applicant and is directed to authoring, under MPEG2, for (1) interleaving into contiguous plural video objects, interleaved units larger than the shortest read time so that video object presentation start and end points are aligned and (2) separate contiguous data blocks where video object presentation start and end points are not aligned.

To appreciate the apparent interpretation relied upon by the Office Action, applicant presented a composite of respectively Figures 18-20 of the *Yamane et al.* teachings. In the interview it is believed that the Examiners understood our current claims as an invention over *Yamane et al.*

As can be seen from our claims, a second presentation time stamp defines a time which is at or after the first presentation time stamp. The first presentation time stamp indicates the time

period in which the graphics is decoded while the decode time stamp indicates the decoding time of a graphics data.

Our second presentation time stamp which is set forth in our control packet, indicates a time at which the graphics data after being decoded is to be displayed in combination with the video stream. Thus, the second presentation time stamp provides a time frame which is at or after the first presentation time stamp.

The *Yamane et al.* teaching, as apparently interpreted by the Office Action, relies upon the system clock SCR which is earlier than *Yamane et al.*'s PTS. That is, the first presentation time stamp indicates an end time of decoding graphics data. The PTS time is greater or equal to the decode time stamp which is the time at which the video stream should be decoded, while the interpretation of the PTS in *Yamane et al.* is a time at which the video data or the audio data contained in the package should be output as the playback output after being decoded.

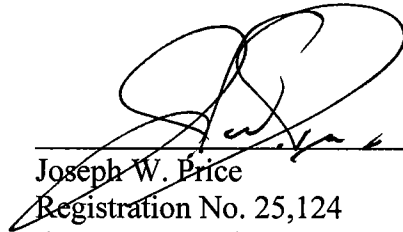
With this clarification, it is believed that our present claims more than adequately define over the *Yamane et al.* reference under either 35 U.S.C. §102 or 35 U.S.C. §103.

With this clarification which is presented in each of our current independent claims, it is believed that the application is now in condition for allowance and early notification of the same is requested.

If there are any further questions with regards to this matter, the undersigned attorney would appreciate a telephone conference.

Respectfully submitted,

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